IN THE SPECIFICATION

Please replace the paragraph starting at line 13 of page 1 and continuing to line 20 of page 1 with the following new paragraph:

When LED lamps are used as a light source in flashlights and other similar lamps for the purpose of illumination in the prior art, a large LED chip is housed in a large package and light amount is obtained by, for example, applying a current of between several ten and several hundred milliamperes. Simultaneously, as the package is made large in size, deterioration or breakage of the LED chip as a result of overheating is prevented by effectively conducting the heat emitted in the LED chip to the outside when it is lit and discharging it to the atmosphere or the like. (For example, see Patent Document 1)

Please replace the paragraph starting at line 24 of page 1 and continuing to line 7 of page 2 with the following new paragraph:

Nevertheless, when a light fixture using an LED lamp as a light source is employed as a vehicle lamp fixture for a headlamp or the like, strict light distribution characteristics are set forth in relevant standards and other regulations with regard to prevent the drivers of oncoming vehicles from being dazzled by the light directed forwards. Furthermore, the configuration of lamps for the headlamp or the like is established in consideration of incandescent light bulbs and other similar items emitting light flux uniformly in almost all directions. Consequently, problems exist in that light distribution characteristics and the like cannot be satisfied by simply replacing the lamp with an LED lamp radiating light in a single ~~inclined~~ direction in a relatively large amount.

Please replace reference 9 at line 15 on page 4 with the following:

9: ~~Silicon Gel~~ Silicone Gel

Please replace reference 12 at line 18 on page 4 with the following:

12: ~~ITO film~~ SiO_2 film

Please replace the paragraph starting at line 13 on page 5 and continuing to line 21 of page 5 with the following:

As a first method of doing so, an LED chip 2 generating blue light and a wavelength conversion member such as fluorophor 5 emitting yellow light are combined, and white light is obtained by mixing the blue light emitted directly from the LED chip 2 with the yellow light emitted from the fluorophor 5 excited by the light from the LED chip 2. As a second method, furthermore, the LED chip 2 emitting ultra-violet light is combined with fluorophor 5 emitting light of the three primaries red (R), green (G), and blue (B). In this case, the light emitted directly from the LED chip 2 is not used as illumination light, and the illumination light from the LED lamp 1 comprises the light emitted from the fluorophor 5.

Please replace the paragraph starting at line 4 on page 6 and continuing to line 15 of page 6 with the following:

Parts such as the LED chip 2, a metal wire 4, and fluorophor 5 are mechanically weak and do not ~~benefit from~~ have good resistance to humidity and other similar factors. Accordingly, these parts are covered by a lens-shaped member formed from transparent resin or the like or by a ~~widow~~ window glass member (the accompanying drawings show an example in which a ~~widow~~ window glass member 6 is used), and through the action of this part and the base 3a, are sealed with respect to outside air. Thus, the above-described parts are prevented from breaking as a result of contact with the other parts, deteriorating as a result of humidity, and other similar factors. Furthermore, it is preferably to fill inert gas, ~~silicon~~ silicone gel, or the like (this explanation assumes usage of ~~silicon~~ silicone gel 9) into the space between the lens-shaped member or the ~~widow~~ window glass member and the white LED light emission portion 8.

Please replace the paragraphs starting at line 22 on page 6 and continuing to line 11 of page 7 with the following:

According, both the ~~widow~~ window glass member 6 and the shielding member 7 are disposed more forward than the fluorophor in the illumination direction, and since the ~~widow~~ window glass member 6 is transparent and the shielding member 7 is opaque, either of these parts can be disposed forward of the other. Furthermore, the shielding member 7 can be freely formed, for example, using the inner and outer surfaces of the ~~widow~~ window glass member 6 with an opaque paint covering or vapor deposition of metallic member

When a headlamp using the LED lamp 1 as a light source is used to provide light for an infrared night-vision device, a member transmitting the infrared light and shielding visible light is used for the ~~widow~~ window glass member 6, and in terms of the shielding member 7, it is sufficient to use a member shielding beam of light from infrared through visible light.

Moreover, when the shielding member 7 is a vapor deposited film with the metallic member, deterioration as a result of oxidation and other similar factors are considered possible, and therefore, it is acceptable to provide protection by covering with a SiO_2 film as indicated by reference 12 in FIG. 2.

Please replace the paragraph starting at line 10 on page 8 and continuing to line 16 of page 8 with the following:

As a further description of the shielding member 7, it can be stated that since the shielding member 7 shields the light from the LED chip 2, when half thereof is covered, the quantity of light is halved, and in this way, loss occurs with respect to the quantity of light emitted from the LED chip 2. The results of studies by the inventors show that the treatment of the surface at least opposing the LED chip 2 has a minor effect on the shape of the light distribution characteristic formed after projection.

Please replace the paragraph starting at line 17 on page 8 and continuing to line 26 of page 8 with the following:

That is to say, when the surface of the shielding member 7 (i.e., the surface facing the projection lens 10) reflects light, this light is re-projected by the projection lens 10 and there is a high probability that formation of the light distribution pattern will be adversely affected. Therefore, it is preferable to provide non-reflection treatment of a color such as black. Nevertheless, a mirror finish is provided to the rear surface, and even when the light emitted from the LED chip 2 is reflected, this returns only to the LED chip 2 side and has no substantial

effect on the formation of the boundary between the fluorophor 5 and the shielding member 7, or in other words, on the formation of the shape of the light distribution characteristic.

Please replace the paragraph starting at line 10 of page 9 and continuing to line 22 of page 9 with the following:

Furthermore, results of simultaneous studies carried out by the inventors regarding the shielding member 7 showed that it is preferable to perform projection with the focus of the projection lens 10 aligned with the shielding member 7 in order to enable more precise formation of the shape of the light distribution characteristic. Moreover, when brightness is required within the light distribution characteristic, it is preferable to perform projection with the focus of the projection lens 10 aligned with the white LED light emission portion 8 (or LED chip 2 when the lamp color is yellow). If the LED chip 2 and the shielding member 7 are disposed in mutual proximity, the focus is substantially aligned with both parts, and this condition is favorable in terms of both shape and brightness. Furthermore, a gap between both of these parts of 2 mm or less is preferable, and more favorable results can be obtained by reducing this gap to 1 mm or less.

Please replace the paragraph starting at line 23 on page 9 and continuing to line 2 of page 10 with the following:

In situations as explained above where the white LED light emission portion 8 is covered by the shielding member 7 is projected by the projection lens 10, a single plano-convex lens is often used for the projection lens 10. Therefore, as shown in FIG. 6, a difference occurs in the

position of, for example, the focus fb for blue light and the focus fr for red light, resulting in what is ~~know~~ known as chromatic aberration.

Please replace the paragraph starting at line 3 on page 10 and continuing to line 14 of page 10 with the following:

In such a case, if the shielding member 7 is disposed closer to any one ~~side~~ of such foci, coloration occurs in the terminator HL (see FIG. 3) corresponding to the portion of the passing light distribution pattern HB in which the shape of the shielding member 7 is projected, and it is therefore impossible to satisfy the regulation requiring that the light color be monochromatic. As a means of solving this problem, if the thickness t of the shielding member 7 is, for example, made to extend from the focus fb for the blue light to the focus fr for the red light as shown in FIG. 7, and a plurality of colors are emitted on the projected terminator HL, the color of the light emitted when this plural colors are mixed is close to white. Thus it is possible to eliminate a sense of specific color being present.

Please replace the paragraph starting at line 14 of page 10 and continuing to line 23 of page 10 with the following:

Alternatively, as shown in FIG. 8, two or more thin shielding members 7 are provided, and for example, the front and rear surfaces ~~surface~~ of the window glass member 6 ~~is~~ are used; furthermore, one of these thin shielding members 7 is disposed at the position of the focus fb for the blue light, and the other is disposed at the position of the focus fr for the red light. In accordance with this configuration, the blue light and the red light having a substantially

complimentary-color relationship are mixed on the projected terminator HL of the passing light distribution pattern HB, and in the same way as explained above for the thick shielding member 7, it is possible to eliminate a sense of specific colors being present.

Please replace the paragraph starting at line 5 of page 12 and continuing to line 12 of page 12 with the following:

Accordingly, this embodiment sets the plurality of combinations of the LED lamp 1 and the projection lens 10 to, for example, three for a single illumination lamp. In this case, the LED lamp 1 can be from the same one used in the previous embodiment. However, as for the projections lens 10, a No. 1 projection lens 10*a* with a same magnification as the projection lens 10 used in the FIG. 1, a No. 2 projection lens ~~10*a*~~ 10*b* with a reduced magnification, and a No. 3 projection lens ~~10*a*~~ 10*c* with a further reduced magnification are provided. All of these projection lenses perform projection in the same direction.

Please replace the paragraph starting at line 13 of page 12 and continuing to line 19 of page 12 with the following:

FIG. 10 shows the passing light distribution pattern HBs obtained from a headlamp ~~lamp~~ configured as explained above. Although this passing light distribution pattern HBs is same to the passing light distribution pattern HB (see FIG. 3) from the previous embodiment in terms of shape, it is formed into a prescribed shape by superimposing the light distribution pattern Ha from the No. 1 projection lens 10*a*, the light distribution pattern Hb from the No. 2 projection lens 10*b*, and the light distribution pattern Hc from the No. 3 projection lens 10*c*.

Please replace the paragraph starting at line 20 on page 12 and continuing to line 1 of page 13 with the following:

Accordingly, the light distribution pattern Hc from the No. 3 projection lens 10*c* having the lowest magnification is the brightest. Moreover, by disposing this light distribution pattern Hc in the central area of the passing light distribution pattern HBs, illumination for the front direction of a vehicle becomes brightest and long-distance visibility is improved. Furthermore, regulations can be satisfied by adjusting the multiplicity of combinations of an LED lamp 1 and a projection lens 10 and the magnification of the corresponding projection lenses 10*a*-10c.

Please replace the paragraph starting at line 2 on page 13 and continuing to line 6 of page 13 with the following:

In general, the quantity of light obtained from the LED lamp 1 is small in comparison with that of the halogen bulbs and metal halide discharged lamps used as light sources in the prior art. Therefore, such a method of increasing the number of combinations and the quantity of light is very effective as a means of realizing the headlamp ~~lamp~~ using the LED lamp 1 as a light source.

Please replace the paragraph starting at line 20 on page 13 and continuing to line 24 of page 13 with the following:

Accordingly, this projection method using the reflector 11 forming a projection image using the reflected light disposes the LED chip 2, the fluorophor 5, the shielding member 7, and the like in opposition to the reflector, or in other words, the parts are disposed in proximity thereto facing approximately backward with respect to the illumination direction P.

Please replace the paragraph starting at line 25 on page 13 and continuing to line 6 of page 14 with the following:

If this reflector 11 is, for example, a multi-reflector combining a plurality of parabolic adjustable surfaces, a high degree of freedom is achieved when forming the passing light distribution pattern HB, and since the chromatic aberration does not fundamentally occur in the reflector 11, the high quality passing light distribution pattern HB can be easily obtained. Furthermore, as in the case of the projection lens explained above, a plurality of combinations of the LED lamp 1 and the reflector 11 can be used in the realization of the headlamp ~~lamp~~.

Please replace the paragraph starting at line 7 on page 14 and continuing to line 19 of page 14 with the following:

As explained above, the present invention realized an LED lamp for a light source of a headlamp disposing an LED chip in the vicinity of the focus of a projection means and providing a shielding member covering a portion of the LED chip in a formation allowing a light distribution characteristic suitable for a headlamp of a vehicle to be obtained when light from the LED chip is magnified and projected in an illumination direction by the projection means. Accordingly, light distribution shapes with accurate characteristics can be obtained in an

extremely simple manner by projecting the shape of the light emission portion of the solid construction constituted by the LED lamp for a light source of a headlamp in the illumination direction using a projection lens or a reflector, and thus, exceptional advantages are achieved in the form of reliability improved by the solid state light source, cost ~~reduced~~ reduction by the simplified construction, and the ability for compact designs.

Please replace the paragraph starting at line 20 on page 14 and continuing to line 24 of page 14 with the following:

While the presently preferred embodiment of the present invention has been shown and described, it will be understood that the present invention is not limited thereto, and that various changes and modification may be ~~bade~~ made by those skilled in the art without departing from the scope of the invention as set forth in the appended claims.